L-Menthyl chloroformate

Other names: (1R)-(-)-Menthyl chloroformate
(-)-(1R)-Menthyl chloroformate
Inchi: InChI=1S/C11H19ClO2/c1-7(2)9-5-4-8(3)6-10(9)14-11(12)13/h7-10H,4-6H2,1-3H3
InchiKey: KIUPCUCGVCGPPA-UHFFFAOYSA-N
Formula: C11H19ClO2
SMILES: CC1CCC(C(C)C)C(OC(=O)Cl)C1
Mol. weight [g/mol]: 218.72
CAS: 14602-86-9

Physical Properties

Property code	Value	Unit	Source
gf	-197.52	kJ/mol	Joback Method
hf	-522.55	kJ/mol	Joback Method
hfus	21.68	kJ/mol	Joback Method
hvap	53.04	kJ/mol	Joback Method
log10ws	-3.70		Crippen Method
logp	3.823		Crippen Method
mcvol	174.670	ml/mol	McGowan Method
pc	2229.20	kPa	Joback Method
rinpol	1067.00		NIST Webbook
rinpol	1067.00		NIST Webbook
tb	574.57	K	Joback Method
tc	785.36	K	Joback Method
tf	299.71	K	Joback Method
vc	0.649	m3/kmol	Joback Method

Temperature Dependent Properties

Property code	Value	Unit	Temperature [K]	Source
cpg	438.98	J/mol×K	574.57	Joback Method
cpg	457.89	J/mol×K	609.70	Joback Method
cpg	475.80	J/mol×K	644.83	Joback Method
cpg	492.71	J/mol×K	679.97	Joback Method
cpg	508.63	J/mol×K	715.10	Joback Method

cpg	523.56	J/mol×K	750.23	Joback Method
cpg	537.50	J/mol×K	785.36	Joback Method
dvisc	0.0030423	Pa×s	299.71	Joback Method
dvisc	0.0015308	Pa×s	345.52	Joback Method
dvisc	0.0009047	Pa×s	391.33	Joback Method
dvisc	0.0005970	Pa×s	437.14	Joback Method
dvisc	0.0004262	Pa×s	482.95	Joback Method
dvisc	0.0003226	Pa×s	528.76	Joback Method
dvisc	0.0002553	Pa×s	574.57	Joback Method

Sources

Crippen Method:	http://pubs.acs.org/doi/abs/10.1021/ci990307l
Crippen Method:	https://www.chemeo.com/doc/models/crippen_log10ws
Joback Method:	https://en.wikipedia.org/wiki/Joback_method
McGowan Method:	http://link.springer.com/article/10.1007/BF02311772
NIST Webbook:	http://webbook.nist.gov/cgi/cbook.cgi?ID=C14602869&Units=SI

Legend

cpg:	Ideal gas heat capacity
dvisc:	Dynamic viscosity
gf:	Standard Gibbs free energy of formation
hf:	Enthalpy of formation at standard conditions
hfus:	Enthalpy of fusion at standard conditions
hvap:	Enthalpy of vaporization at standard conditions
log10ws:	Log10 of Water solubility in mol/l
logp:	Octanol/Water partition coefficient
mcvol:	McGowan's characteristic volume
pc:	Critical Pressure
rinpol:	Non-polar retention indices
tb:	Normal Boiling Point Temperature
tc:	Critical Temperature
tf:	Normal melting (fusion) point
vc:	Critical Volume